

and a third line connection, a rotor which in relation to the housing is limitlessly rotatable, a plurality of fluid chambers whose volume, when the rotor rotates at a first angle, varies between a minimum and a maximum volume, and a face plate provided with face plate conduits for, while the rotor is rotating, alternately connecting the fluid chambers with the three line connections, which face plate is rotatable around a rotation axis in relation to the housing and is provided with means for without interruption keeping a face plate conduit in communication with the respective line connection while the face plate is rotating, wherein the face plate, in relation to the housing, is able to rotate at a second angle ~~which is similar to~~ wherein the second angle is approximately equal to the first angle.

34. (Currently Amended) A hydraulic transformer for use in an apparatus according to claim 21, wherein a first fluid flow having a first pressure is transformed into a second fluid flow having a second pressure, the hydraulic transformer comprising a housing, a first line connection, a second line connection and a third line connection, a rotor which in relation to the housing is limitlessly rotatable having a plurality of fluid chambers whose volume during rotation of the rotor varies between a minimum volume and a maximum volume, a plurality of ~~face plate gates for closing the fluid chambers and~~ rotor conduits for connecting ~~the~~ a plurality of face plate gates with the fluid chambers, and a face plate provided with three rotor gates cooperating with the face plate gates which during rotation of the rotor serve for closing and alternately connecting the fluid chambers with the three line connections, wherein the maximum volume of the fluid chambers to be closed by means of the face plate is maximally five times as large as the minimum volume.

35. (Previously Amended) A hydraulic transformer according to claim 34, wherein the maximum volume of the fluid chambers to be closed by means of the face plate is maximally three times the minimum volume.

36. (Currently Amended) A hydraulic transformer according to claim 34, wherein the rotor ~~has between~~ includes one of nine and twelve fluid chambers.

37. (Currently Amended) A hydraulic transformer according to claim 34, wherein the rotor gates are separated by walls and the face plate gates and the rotor gates are dimensioned such that at least two rotor gates are of the same size, and ~~all three the~~ the walls between the rotor gates can close ~~a fluid chamber~~ respective fluid chambers, simultaneously, for a particular position of the rotor

38. (Previously Amended) A hydraulic transformer according to claim 33, wherein the face plate at the side of the fluid chambers is bordered by a first separating surface and at the side facing away from the fluid chambers by a second separating surface, the first separating surface comprising at least three rotor gates located at a first radius and being in communication with three face plate conduits, and the second separating surface comprising two housing gates located at a second radius, and each being in communication with a face plate conduit, wherein the third face plate conduit is in communication with a housing gate located at a third radius which is different from the second radius.

39. (Currently Amended) A hydraulic transformer according to claim 33, wherein the face plate at the side of the fluid chambers is bordered by a first separating surface and at the side facing away from the fluid chambers by a second separating surface ~~and between the first separating surface and the second separating circumference, by an external circumference~~, the first separating surface comprising at least three rotor gates located at a first radius and being in communication with three face plate conduits, and the second separating surface comprising two housing gates located at a second radius, each being in communication with a face plate conduit and the third face plate conduit is being in communication with a housing gate at the external circumference of the face plate.

40. (Currently Amended) A hydraulic transformer according to claim 33, wherein the face plate at the side of the fluid chambers is bordered by a first separating surface and at the side facing away from the fluid chambers by a second separating surface, the first separating surface comprising at least three rotor gates located at a first radius and being in communication with three face plate conduits, and the second separating surface comprising two housing gates located at a second radius, and each being in communication with a face plate conduit, the third face plate conduit is being in communication with a housing gate near the rotation axis of the face plate.

41. (Previously Amended) A hydraulic transformer according to claim 33, wherein the face plate at the side of the fluid chambers is bordered by a first separating surface and at the side facing away from the fluid chambers by a second separating surface, the first separating surface comprising at least three rotor gates located at first radius and being in communication with three face plate conduits, and the second separating surface comprising two housing gates located at a

second radius, and each being in communication with a face plate conduit, at the second separating surface, the housing is provided with four face plate gates located at the second radius; two face plate gates being positioned diametrically opposite one another and being in direct communication with the first and the second line connection respectively, while the other two face plate gates positioned diametrically opposite one another are in communication via a shuttle valve with the first and a second line connection.

42. (Previously Added) A hydraulic transformer according to claim 41 wherein the shuttle valve forms part of the face plate.

43. (Currently Amended) A hydraulic transformer according to claim 33, wherein the rotor ~~has between~~ includes one of nine and twelve fluid chambers.

44. (Currently Amended) A hydraulic transformer according to claim 33, wherein the rotor gates are separated by walls and the face plate gates and the rotor gates are dimensioned such that at least two rotor gates are of the same size, and ~~all three the~~ the walls between the rotor gates can close ~~a fluid chamber~~ respective fluid chambers, simultaneously, for a particular position of the rotor.

45. (Previously Added) A hydraulic transformer according to claim 41 wherein the shuttle valve is coupled to the face plate.



A DOCPHOENIX

APPL PARTS

IMIS _____
Internal Misc. Paper
LET. _____
Misc. Incoming Letter

371P
PCT Papers in a 371 Application

A...
Amendment Including Elections

ABST
Abstract

ADS
Application Data Sheet

AF/D
Affidavit or Exhibit Received

APPENDIX
Appendix

ARTIFACT
Artifact

BIB
Bib Data Sheet

CLM
Claim

COMPUTER
Computer Program Listing

CRFL
All CRF Papers for Backfile

DIST
Terminal Disclaimer Filed

DRW
Drawings

FOR
Foreign Reference

FRPR
Foreign Priority Papers

IDS
IDS Including 1449

NPL
Non-Patent Literature

OATH
Oath or Declaration

PET.
Petition

RETMAIL
Mail Returned by USPS

SEQLIST
Sequence Listing

SPEC
Specification

SPEC NO
Specification Not in English

TRNA
Transmittal New Application

CTNF
Count Non-Final

CTRS
Count Restriction

EXIN
Examiner Interview

M903
DO/EO Acceptance

M905
DO/EO Missing Requirement

NFDR
Formal Drawing Required

NOA
Notice of Allowance

PETDEC
Petition Decision

OUTGOING

CTMS _____
Misc. Office Action

1449
Signed 1449

892
892

ABN
Abandonment

APDEC
Board of Appeals Decision

APEA
Examiner Answer

CTAV
Count Advisory Action

CTEQ
Count Ex parte Quayle

CTFR
Count Final Rejection

INCOMING

AP.B
Appeal Brief

C.AD
Change of Address

N/AP
Notice of Appeal

PA..
Change in Power of Attorney

REM 5
Applicant Remarks in Amendment

XT/
Extension of Time filed separate

BACKFILE DOCUMENT INDEX SHEET

Internal

SRNT
Examiner Search Notes

CLMPTO
PTO Prepared Complete Claim Set

ECBOX
Evidence Copy Box Identification

WCLM
Claim Worksheet

WFEE
Fee Worksheet

File Wrapper

FWCLM
File Wrapper Claim

IIFW
File Wrapper Issue Information

SRFW
File Wrapper Search Info

REMARKS

Entry of the present amendment and reconsideration of the claims is respectfully requested.

I. Status of the Claims

Claim 26 has been cancelled.

Claims 21-25, 27-33, 36, 37, 39, 40, 43, and 44 have been amended and the amendments do not add new matter.

Claims 21-25 and 27-45 are pending in the application.

Claims 21-45 are objected to for informal matters. Applicant has amended the claims to address the informalities and respectfully request that the objection be withdrawn.

II. Acknowledgment of Allowable Subject Matter

Applicant would like to thank the Examiner for the acknowledgment of allowable subject matter in claims 28, 29, 37-42 and 44-45. Applicant has amended the claims to overcome the rejections under 35 U.S.C. § 112.

III. Rejections Under 35 U.S.C. § 112

Claims 21-45 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite and failing to particularly claim the invention. The Examiner states that in claim 21, lines 4-5 the term “solely” is contradictory to the remaining elements in the claim recited on lines 9-10 and claims 25 and 31. Applicant has amended claim 21 to remove the term.

Regarding claim 33, the Examiner states that the term “similar” is unclear. Applicant has amended claim 33 to recite the element that “the second angle is approximately equal to the first angle” and this renders the claim definite.

Regarding claim 34, the Examiner states that lines 7-8 contradict the specification. Applicant has amended the claim, pursuant to the Examiner’s suggestion, to recite that the “face plate” and not the “face plate gates” actually close the fluid chambers. Support for this amendment can be found on page 8, lines 4-6.

Regarding claims and 44, Applicant has amended the claims pursuant to the Examiner’s suggestion.

Additionally, the remaining claims have been further reviewed and amended to correct other informalities. Thus, Applicant respectfully requests the Examiner to withdraw the above rejection.

IV. Rejections under 35 U.S.C. § 101 - Double Patenting

Claims 21-27, 31-36 and 43 have been rejected under 35 U.S.C. §101 for nonstatutory judicially created doctrine of obviousness-type double patenting over claim 3 of U.S. Patent No. 6,116,138 to Achten in view of U.S. Patent No. 2,550,405 to Crosby and U.S. Patent No. 5,251,442 to Roche. Achten’s invention relates to a hydraulic transformer that controls a hydromotor without any additional valves or controls. Achten discloses a simple hydraulic design wherein each hydromotor has its own hydraulic transformer. Additionally, neither Crosby nor Roche, as argued below, can be properly combined with each other nor can they be combined with Achten to reject the claims.